

ABSTRACT

The present invention relates to a method of noninvasively and quantitatively evaluating a degree of a hair damage, specifically the degree of a hair damage caused by a permanent treatment and/or the degree of a damage caused by an oxidation treatment. The degree of a damage of a hair, whose degree of a damage is unknown, is evaluated on the basis of a correlation between the degree of a hair damage and a result of multivariate analysis near infrared absorption spectrum of the hair. The correlation can be obtained based on a result of multivariate analysis of near infrared absorption spectra of two or more kinds of hairs, whose degree of a damage is known. Furthermore, a hysteresis of treatment applied to the hair or the likelihood to be easily damaged by a treatment is determined from the obtained evaluation result. Principal component analysis (PCA), SIMCA, or KNN is preferably used as an algorithm of the multivariate analysis.